Amateur Radio Club's 75th Anniversary

Amateur Radio Club members (left to right) Reuben Tayek '30 EEP, Dick Richard, Bill Gainer '32 CEE and '46 EE (honorary degree), Harold Holmberg '29 EEP. The 75th Radio Club (left to right) Ray Meyer, ETE senior, club president; Hanns Von Bosse, EE sophomore, treasurer; Michael Placek, ETE freshman, secretary; Hans Schroeder '55, advisor and station trustee. They are in the radio shack located in the Student Life and Campus Center.

In this age of e-mail and cell phones, there is a group of students at MSOE who continue to explore and carry on the traditions of a form of communication dating back to the early 1900s. They are the Amateur Radio Club (ARC), known among radio operators around the world as station W9HHX.

From a modest office on the third floor of the Student Life and Campus Center, licensed members of this club communicate with people around the globe via radio systems once referred to as the "wireless." This year marks the organization's 75th anniversary on campus and, while its station and equipment have been modified over the years, the group's enthusiasm for this type of communication is still going strong.

Some of the credit for the club's longevity on campus stems from the fact that engineers tend to be interested in this type of hobby, said Ray Meyer, current ARC president and a senior majoring in electrical engineering technology. "The number of members has waxed and waned over the years," Meyer said, "but, the organization, continues to exist."

Amateur radio, which claims at least a million participants world wide and more than 2,000 clubs across the U.S., could be considered more of a technical society, or a professional organization than a club, Meyer explained.

"There have been amateur radio operators since the turn of the century when Marconi first transmitted radio signals across the Atlantic," he said. Hobbyists and enthusiasts around the world, who call themselves "hams," have kept the interest in this type of communication alive ever since.

The ARC was the first student organization to be chartered at MSOE. It began as a sending and receiving station in 1914 and, 10 years later, was developed into amateur station W9SO by members of the college's Radio Broadcasters Club. Later that year, the call sign was changed to W9HHX, which remains today.

In its 75 years of sending and receiving signals, the ARC has made contact with nearly every country on the planet, as well as hundreds of stations across America. Some of its more notable contacts include Barry Goldwater, described as a very active radio enthusiast by Hans Schroeder '55, professor of electrical engineering and computer science and advisor to the ARC. MSOE broadcasters also communicated with Admiral Byrd's South Pole expedition back in the 1920s and, in later years, with King Hussein of Jordan.

"Amateur radio really does transcend all levels of society and culture," Schroeder said.

Contacts made through amateur radio can also lead to long-time friendships. Schroeder, who refers to himself as "98 percent retired," still keeps in touch with one of the teachers he had while a student at MSOE, through the radio waves.

Hams also play a very important role by providing back-up emergency communication service when power failures occur. For example, station W9HHX was the first in the United States to pick up distress signals from San Juan, Puerto Rico, during a hurricane disaster in 1926.

"Granted, with the advent of cellular telephones, the use of amateur radio for emergency communication is less predominant in developed areas today, but you still see a lot of amateur radio assistance in less developed areas," Meyer said. "With amateur radio, one person can talk and know that literally hundreds of others may be listening."

Many amateur radio operators overseas speak English, he said, although it is not uncommon to hear conversations going on in other languages. It is sometimes easier, however, to make contact by using speechless forms of communication, such as morse code and radio teletype, Meyer said. Hams also use a series of internationally accepted, 3-letter abbreviations, called Q-signals, to communicate.

Today, W9HHX uses many types of radio equipment and modes of communication to send and receive messages including RTTY, digital modes of packet radio (similar to e-mail), Amtor and a repeater (used for local communication), which sits on the top of the Margaret Loock Residence Hall.

"There are many dimensions to amateur radio," Schroeder said. "Some operators specialize in microwave transmissions, others use what is called 'moon bounce,' which involves sending signals that reflect off the moon, and others use only low-frequency transmissions."

Working with the various equipment and communication techniques helps students to better understand what they are learning in the classroom, Schroeder said. "It makes a lot of the theory more meaningful."

For Meyer, part of the attraction of amateur radio is the awesome ability to send a signal great distances, using only the power given off by the operator's radio. "There is no station in between (helping the signal along its way). The energy you send is what makes it travel around the world," he said. "There is a little bit of mysticism in it."

More information about the ARC is available on the club's Web site, www.msoe.edu/st_orgs/w9hhx/theclub.htm.